

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILIN	G DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,471	12/0	07/2004	Martin Wagner	DE 020141 6124	
65913 NXP, B.V.	7590	02/07/2008		EXAM	INER
NXP INTELLECTUAL PROPERTY DEPARTMENT				BONZO, BRYCE P	
M/S41-SJ 1109 MCKA	Y DRIVE			ART UNIT	PAPER NUMBER
SAN JOSE, C	CA 95131		2113		· · · · · · · · · · · · · · · · · · ·
				NOTIFICATION DATE	DELIVERY MODE
				02/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

			$m \sim$			
		Application No.	Applicant(s)			
Office Action Summary		10/517,471	WAGNER ET AL.			
		Examiner	Art Unit			
··· -		Bryce P. Bonzo	2113			
Period fo	The MAILING DATE of this communication apport	pears on the cover sheet with the o	orrespondence address			
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailine and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. (D) (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 16 N	lovember 2007.				
		s action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1 and 3-9 is/are pending in the application of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1 and 3-9 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	wn from consideration.				
Applicati	on Papers					
10)🖾	The specification is objected to by the Examine The drawing(s) filed on <u>07 December 2004</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	are: a) \square accepted or b) \square object drawing(s) be held in abeyance. Settion is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority u	nder 35 U.S.C. § 119					
12) <u></u> / a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau ee the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment	· · ·	🗖	(070 440)			
2) 🔲 Notice 3) 🔲 Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) ' No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

FINAL OFFICIAL ACTION

Status of the Claims

Claims 1, 3-6, 8 and 9 are rejected under 35 USC §102.

Claim 7 is rejected under 35 USC §103.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Sheldon (United States Patent No 6,307,480). As per the claims, Sheldon discloses:

1. A method of monitoring the operation of at least one microcontroller unit associated with a system, the method comprising:

associating at least one monitoring module with the microcontroller unit has (column 3, lines 46-51),

resetting of the microcontroller unit (column 4, lines 30-44); and

acknowledging the resetting to the monitoring module by transmitting at least one confirming signal (column 4, lines 55-63), wherein the confirming signal is formed by at

10/517,471

Art Unit: 2113

least one trigger signal or trigger code that differs from the normal operations of the microcontroller unit or is permitted only once by the monitoring module or both (column 4, lines 34-62).

3. A method as claimed in claim 1 wherein,

in relation to the operation of the microcontroller unit, a distinction is made between different reset events (column 4, lines 34-44:RS does not clear until Acknowledged) and in that

these different reset events are acknowledged to the monitoring module (10) by means of different confirming signals (ACK is only generated once per reset).

4. A base chip adapted to monitor operation of at least one microcontroller unit the base chip comprising:

at least one reset unit connected to the microcontroller and adapted to reset the microcontroller unit (column 4, lines 55-63), and at least one monitoring module that is associated with the microcontroller unit and to which the fact that a reset of the microcontroller unit had taken place can be acknowledges by at least one confirming signal (column 4, lines 46-51), wherein the confirming signal is formed by at least one trigger signal or trigger code that differs from the normal operation of the microcontroller unit or is permitted only once by the monitoring module or both (column 4, lines 34-44).

5. A base chip as claimed in claim 4, wherein

at least one information unit that is provided to allow for different reset events (column 4, lines 34-44), and

at least one supply unit that is connected to the microcontroller unit (it is inherent that a process requires power supply).

6. A base chip as claimed in claim 4 wherein

the monitoring module is adapted to be triggered f at least one interface unit or (column 3, lines 46-51).

to distinguish between individual accesses to the monitoring module different reset events can be marked by different trigger values or both.

- 8. A base chip as claimed in claim 4, wherein at least one signal line is provided between the monitoring module and the microcontroller unit, the signal line operative to transmit the confirming signal, the confirming signal including a trigger signal or a trigger code that differs from a normal operation of the microcontroller unit (column 4, lines 34-44).
- 9. A control system comprising at least one microcontroller unit (item 14) and at least one base chip (12) as claimed in claim 4.

Rejections under 35 USC §103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sheldon (United States Patent No 6,307,480).

As per claim 7, Sheldon does not explicitly disclose the use of a failsafe mode. Sheldon does disclose a special mode wherein the microprocessor goes into a constant reset mode if the reset is not acknowledged properly preventing the microprocessor from operating (column 4, lines 55-60).

Official Notice is given that it is notoriously well known to implement low power fail-safe modes in devices which are unable to properly reset. This is done so that the device unable to effect the system it is incorporated. In many system where power is at a premium, such satellites, small electronics and automobiles where power can come at a premium, reducing the power drain by a non-functional device is desirable and often practiced. thus it would have been obvious to modify Sheldon's safety feature of the continuous reset into a disabling to a low-power failsafe mode, thus allowing the

remainder of the system to operate with concern for error from the device and return the power to the system rather than powering a faulty device.

Response to Applicant's Arguments

Applicant argues that Sheldon does not provide a confirming signal is formed by at least one trigger signal or trigger code that differs from the normal operations of the microcontroller unit or is permitted only once by the monitoring module or both.

The Examiner contends that the reset complete signal line (34) is not part of the normal operation of the processor, only being used during a reset operation. Further, the reset complete signal is an input to the R input of an SR latch, and thus is only handled once due to the well known operation and SR latch.

Final Disposition

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Application/Control Number:

10/517,471

Art Unit: 2113

Page 7

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Bryce P. Bonzo whose telephone number is (571)272-

3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bryce PiBon Zo Bryce PiBonzo

Primary Examiner